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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,744	12/29/2000	Kenneth Gould	2585-007	9606

7590 03/19/2004
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EXAMINER

LE, DIEU MINH T

ART UNIT	PAPER NUMBER
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2114

DATE MAILED: 03/19/2004

23

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/752,744

Applicant(s)

GOULD ET AL.

Examiner

Dieu-Minh Le

Art Unit

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-12 and 17-24 is/are rejected.
- 7) ☒ Claim(s) 5-6, 13-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08/26/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2114

Part III DETAILED ACTION

Specification

1. Claims 1-24 are presented for examination.

Applicant is reminded of the proper format and content of:

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

Art Unit: 2114

- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (e) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:

Art Unit: 2114

- (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (f) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (g) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (h) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or

Art Unit: 2114

type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

- (i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (j) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (k) Sequence Listing, See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Art Unit: 2114

2. Claims 7-8, 19-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 7, line 14, --- need to be inserted after "network".

As per claim 19, line 1, "further comprises" need to be removed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,9, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Subramaniam (U.S. Patent 6,618,373).

As per claim 1:

Art Unit: 2114

Subramaniam explicitly teaches:

- A multicast failover [abstract, fig. 1, col. 4, lines 50-62] device comprising:
 - a processor [fig. 1];
 - at least one primary receiver for receiving packets from at least one primary multicast stream source (i.e., fig. 1, server 101 and clients 121-124);
 - at least one secondary receiver for receiving packets from at least one secondary multicast stream source (i.e., fig. 1, server 102 and clients 121-124);
 - logic for multicasting packets received by the primary multicasting stream source [col. 3, lines 34-49] over an external network (i.e., wide-area-network, WAN) [col. 1, lines 25-27];
 - logic for detecting an adverse change in a packet from the primary multicast stream [col. 4, lines 50-62] and ;
 - logic for multicasting a packet from the secondary multicast stream in lieu of multicasting the packet from the primary multicast stream when the adverse change in the packet of the primary multicast stream is detected [col. 4, lines 50-62].

As per claims 9 and 17:

These claims are similar to claim 1. The only minor different is that claims 9 and 17 introduce "packets having first multicast IP addresses and port number". However, Subramaniam explicitly teaches:

- the IP multicast protocol [col. 4, lines 10-11];
- transmission control protocol/internet protocol (TCP/IP) used within multicasting system [col. 1, lines 20-21];
- Internet Protocol Multicast (IPM) used for multicast packets transmission [col. 2, lines 42-43].

Therefore, these claims are also rejected under the same rationale applied against claim 1. In addition, all of the limitations have been noted in the rejection as per claim 1.

This is clearly shown that Subramaniam's teaching capabilities are corresponding to Applicant's invention.

4. Claims 1-4, 9-12, and 17-20 are rejected under 35 U.S.C. § 102(e) as being anticipated by Bhagavath et al. (US Patent 6,501,763 hereafter referred to as Bhagavath).

As per claim 1:

Bhagavath explicitly teaches:

Art Unit: 2114

- A multicast failover [abstract, fig. 1, col. 3, lines 1-2] device comprising:
 - a processor [fig. 3, col. 11, lines 40-41];
 - at least one primary receiver for receiving packets from at least one primary multicast stream source (i.e., fig. 1 and 1E, subscription server, plurality of retransmit servers) [col. 1, lines 6 and 16];
 - at least one secondary receiver for receiving packets from at least one secondary multicast stream source (i.e., fig. 1 and 1E, subscription server, plurality of retransmit servers) [col. 1, lines 6 and 16];
 - logic for multicasting packets received by the primary multicasting stream source [col. 1, lines 55-59 and col. 4, line 51] over an external network (i.e., Internet) [col. 1, lines 17-18];
 - logic for detecting an adverse change in a packet from the primary multicast stream [col. 2, lines 40-42 and col. 4, lines 54-65] and ;
 - logic for multicasting a packet from the secondary multicast stream in lieu of multicasting the packet from the primary multicast stream when the adverse change in the packet of the primary multicast stream is detected [[col. 2, lines 40-42 and col. 4, lines 54-65].

As per claim 2:

Bhagavath further explicitly teaches:

- storage for a primary buffer for storing packets received from the primary multicast stream source [fig. 1, col. 5, lines 25-48]; and
- storage for a secondary buffer for storing packets received from the secondary multicast stream source [fig. 1, col. 5, lines 25-48].

As per claim 3:

Bhagavath further explicitly teaches:

- logic for multicasting packets from the primary buffer [fig. 1, col. 5, lines 25-48] over an external network (i.e., Internet) [col. 1, lines 17-18]; and
- logic for detecting an adverse change (missing packets or losing packets) in a packet stored in the primary buffer [fig. 1, col. 5, lines 25-60].
- logic for multicasting a packet from the secondary buffer over the external network when the adverse change (missing packets or losing packets) in the corresponding packet of the primary buffer is detected [fig. 1, col. 5, lines 25-60].

As per claim 4:

Bhagavath further explicitly teaches:

- logic for synchronizing the packets in the primary buffer and the secondary buffer [fig. 1, col. 6, lines 5-6 and lines 20-21].

As per claims 9 and 17:

These claims are similar to claim 1. The only minor different is that claims 9 and 17 introduce "packets having first multicast IP addresses and port number". However, Bhagavath explicitly teaches:

- multicast session identified by an IP address and port number [col. 1, lines 25-26];
- IP multicast routing protocol [col. 1, line 59];
- IP address and port number of each multicast session for which it has buffered packets [col. 12, lines 31-34].

Therefore, these claims are also rejected under the same rationale applied against claim 1. In addition, all of the limitations have been noted in the rejection as per claim 1.

As per claims 10-12, and 18-20:

Art Unit: 2114

These claims are similar to claim 2-4. Therefore, these claims are also rejected under the same rationale applied against claims 2-4. In addition, all of the limitations have been noted in the rejection as per claims 2-4.

This is clearly shown that Bhagavath's teaching capabilities are corresponding to Applicant's invention.

Allowable Subject Matter

5. Claims 5-8, 13-16, and 21-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. A shortened statutory period for response to this action is set to expired THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C. 133.

Art Unit: 2114

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (703) 305-9408. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel, can be reached on (703)305-9713. The fax phone number for this Group is (703)746-7240.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703)872-9306, (for formal communications
intended for entry)

Or:

(703)872-9306 (for informal or draft
communications, please label "PROPOSED" or
"DRAFT")

Art Unit: 2114

Hand-delivered responses should be brought to Crystal
Park II, 2121 Crystal Drive, Arlington. VA., Sixth
Floor (Receptionist).



**DIEU-MINH THAI LE
PRIMARY EXAMINER
ART UNIT 2114**

DML
3/17/04